

Lehigh Southwest Cement Company

Permanente Plant
24001 Stevens Creek Boulevard
Phone (408) 996-4000
Fax (408) 725-1019
www.lehighcement.com

March 30, 2015

Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Lehigh Southwest Cement Company - Permanente Facility #A0017

RE: Permit to Operate Conditions ID #s 2786 and 11780
SO₂ and NO_x Emission Compliance Data Monthly Report for February 2015
Submitted electronically to CEMS Monthly@BAAQMD.gov

To Whom It May Concern:

Please find attached the compiled Hg, SO₂ and NO_x average concentrations and daily mass emission rate compliance data for the Lehigh Southwest Cement Company – Permanente (Lehigh) facility PTO Condition ID #s 603, 2786, and 11780, for the month of February 2015. In addition, NO_x, Hg, D/F, NH₃, THC, and HCl emission limits are presented based on Regulation 9 Rule 13 compliance.

PTO Condition ID # 603 Item *16 Emission Limits states the following:

- Item 11 - The owner/operator of S-154 and A-154 Lime Dry/Slurry Injection System shall not exceed 3 ppmv of HCl, at 7 percent oxygen, over 30 operating day rolling average. The owner/operator may use the hydrate lime injection rate as a parametric monitor for HCl while the Performance Specification for HCl is being developed. The owner/operator of S-154 and A-154 shall not operate below 2.8 ton of dry/slurry lime injection per day, over 30-operating day rolling average.
- Item *16 - The owner/operator of S-154, S-171 and S-172 shall not emit more than 55 pounds of mercury per million tons of clinker produced, over 30-operating day rolling average and maximum 88 lbs/yr (12-month rolling average).
- Item*21- The owner/operator of S-154 shall not emit more than 12 ppmv of total organic HAPs, at 7 percent oxygen over 30-operating day rolling average. The owner/operator may use the total hydrocarbon (THC) CEMS as a parametric monitor for the total organic HAP as approved by the District and established by source tests. The owner/operator of S-154 and A-154 shall not exceed 13,500 ppmv of THC, over 30-operating day rolling average.
- Item*22 - The owner/operator of S-154 shall not emit more than 0.2 ng-TEQ/dscm of dioxins and furans (D/F), at 7 percent oxygen over 24-hour rolling average. The owner/operator may use temperature CEMS as a parametric monitor for the D/F as approved by the District and established by source tests. The kiln exhaust gas at the inlet to the PM control device shall not exceed 198 °C (388 °F), over 24-hour rolling average.

PTO Condition ID #s 2786 Item A.1 and A.4 Gaseous Emission Limitation states the following:

- Item A.1 - The owner/operator shall ensure the emission of sulfur dioxide does not exceed 481 lbs/hour also averaged over the 24 hour calendar day.

PTO Condition ID # 11780 Item C.1, C.*3, and C.4 Emission Limits states the following:

- Item C. 3 - The emission of Nitrogen Oxides into the atmosphere shall not exceed 2.3 lb/ton of clinker as determined on a 30-operating day rolling average.
- Item C.4 - The owner/operator of S-154 shall not exceed the six month, 24-hour rolling average (or 182-day rolling average) of 106 ppmv of ammonia, dry at 7% oxygen.

Regulation 9 Rule 13

- 301.1 The 30-operating day rolling average of nitrogen oxides (NO_x) emissions from the kiln shall not exceed 2.3 pounds per ton of clinker produced.
- 301.4 The 24-hour rolling average of ammonia (NH₃) emissions from the kiln shall not exceed baseline emission levels by more than 10 ppmv, dry at 7 percent oxygen.
- 301.5 The 24-hour rolling average of dioxins and furans (D/F) emissions from the kiln shall not exceed 0.2 ng-TEQ/dscm at 7 percent oxygen.
- 301.6 The 30-operating day rolling average of mercury emissions from the kiln shall not exceed 55 pounds per million tons of clinker produced.
- 301.7 shall The 30-operating day rolling average of total hydrocarbon (THC) emissions from the kiln not exceed 24 ppmv, dry at 7 percent oxygen; or as an alternative, provided the provisions of Section 9-13-403 have been completed, the 30-operating day rolling average of total organic HAP emissions from the kiln shall not exceed 12 ppmv, dry at 7 percent oxygen.
- 301.8 The 30-operating day rolling average hydrogen chloride (HCl) emissions from the kiln shall not exceed 3 ppmv, dry at 7 percent oxygen.

Please note the ppm values in the table are as is and the ppmv values are dried and corrected to 7 percent oxygen.

For Condition ID # 603, # 2786, and # 11780, there were no variances or exceedances of the permit conditions cited above for the reporting calendar month.

Please refer to the asterisks on the following CEM Tables.

*HCl CEM values are displayed but do not reflect compliance or non-compliance since certified EPA Protocol 1 calibration gases are currently unavailable. For compliance purposes, lime injection rates have been provided to demonstrate compliance through the proposed parametric monitoring plan displayed as a daily rate of tons of lime injected per operating day. Until improved CEM technology is available, Lehigh will continue to utilize the parametric monitoring plan based upon BAAQMD approval.

Please noted the kiln system was shut down for a major maintenance overhaul in January and February, 2015. The new Main Stack and the new Clinker Cooler Stack are in operation after the kiln startup in February 13, 2015. The compliance tests and the RATA tests have been conducted by the Avogadro Group in February, 2015. The CEM reporting format has been changed to reflect the new configuration of the new stacks. Additional changes will be forth coming as more information is available.

Please let me know if there are any questions or comments.

Thank you,

A handwritten signature in black ink, appearing to read "Chow Yip".

Chow Yip
Environmental Engineer
Lehigh Southwest Cement Company – Permanente Plant
cc: Greg Knapp, LSCC
Alan Sabawi, LSCC
Ricardo Del Valle, LSCC
Sam Barket III, LSCC

**BAY AREA
AIR QUALITY MANAGEMENT DISTRICT
Monthly Continuous Monitoring Report**

COMPANY: LEHIGH PERMANENTE CEMENT

SOURCE: CEMENT KILN

Month: Feb-15

DAY	SOx		NOx		Daily Production		Hg	HCl		NH3	HAP
	Daily	Daily Mass Rate	Daily	Daily Mass Rate	Clinker	NOx / Clinker	Mass Rate	Daily	Lime Usage	Daily	Daily
	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	ppm	lbs/hour	ppm	lbs/hour	ston/day	lb/ston	lb/hr	ppmv	ston/day	ppmv	ppmv
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13	10	18	31	29	353	2.0	0.001	3*	0.41	28	0.3
14	70	221	121	345	3793	2.2	0.001	6*	5.06	106	0.85
15	85	183	162	326	3729	2.1	0.001	2*	3.35	98	2.33
16	36	84	92	144	1138	3.0	0.001	2*	1.17	44	1.88
17	61	191	142	315	3453	2.2	0.012	3*	3.03	81	1.47
18	64	196	138	315	3465	2.2	0.016	3*	3.50	77	1.32
19	74	238	133	319	3876	2.0	0.011	3*	2.67	77	1.18
20	51	190	129	319	3552	2.2	0.015	2*	2.82	88	1.39
21	28	22	89	90	823	2.6	0.003	1*	0.73	41	0.51
22	38	137	127	330	4473	1.8	0.007	2*	3.08	92	0.75
23	44	152	174	426	4112	2.5	0.008	2*	2.73	73	0.63
24	51	190	99	256	3908	1.6	0.009	2*	2.70	73	1.24
25	85	319	106	266	4705	1.4	0.001	4*	3.25	131	1.09
26	68	258	111	301	4393	1.6	0.002	3*	4.17	109	1.04
27	58	193	121	293	4153	1.7	0.005	1*	4.13	92	0.98
28	83	244	116	276	4201	1.6	0.009	4*	3.49	121	0.84
MTD					54127	1.9	2.448 lbs				

Kiln Down

Note: 1. The lbs/hr emissions are instantaneous average from NOx/SOx data points which are recorded every 15 second. The KMDC
 2. The ppm values are collected as is.
 3. The ppmv values are corrected to dry & 7% O2.
 4. The Hg MTD is in lbs..

**BAY AREA
AIR QUALITY MANAGEMENT DISTRICT
Monthly Continuous Monitoring Report**

LEHIGH PERMANENTE CEMENT
Month: Feb-15

SOURCE: CEMENT KILN

DAY	NOx			Hg			HCl	NH3	THC	HAP
	30-Op Day	30-Op Day Mass Rate	30-Op Day lb NOx / ton Clinker	30-Op Day Rolling Average	30-Op Day Rolling Average lbs Hg / million tons Clinker Produced	12-Month Rolling Average	30-Op Day	182-Op Day NH3 Emission	30-Op Day	30-Op Day
	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average
	ppm	lbs/hour	lb/ston	lbs/hour	lbs Hg/mil tons Clinker Produced	lbs	ppmv	ppmv	ppmv	ppmv
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13	152	331	2.0	0.006	39	39	4*	85	87	1.65
14	151	332	2.0	0.006	38	39	4*	85	85	1.61
15	150	331	2.0	0.006	38	39	4*	85	85	1.61
16	148	326	2.0	0.006	38	39	4*	85	85	1.61
17	148	324	2.0	0.006	40	39	4*	85	85	1.61
18	146	322	2.0	0.007	42	39	4*	85	85	1.6
19	145	320	2.0	0.007	43	39	4*	85	83	1.57
20	143	318	2.0	0.007	45	39	4*	86	82	1.55
21	141	309	2.0	0.007	46	39	4*	85	79	1.5
22	139	307	2.0	0.007	47	39	4*	86	77	1.46
23	139	309	2.0	0.007	47	39	4*	86	75	1.41
24	137	306	2.0	0.007	48	39	4*	86	74	1.4
25	135	303	1.9	0.007	47	39	4*	86	73	1.39
26	133	300	1.9	0.007	45	39	4*	86	73	1.38
27	132	299	1.9	0.007	45	39	4*	86	71	1.34
28	130	296	1.9	0.007	46	39	4*	87	69	1.3

Kiln Down

Note: 1. The new emission regulation started on September 9, 2013. The first 30-Op Day ended on October 17, 2013. The 30-Day Rolling Averages are reported starting on October 17 2013.

**BAY AREA
AIR QUALITY MANAGEMENT DISTRICT
Monthly Continuous Monitoring Report**

LEHIGH PERMANENTE CEMENT
Month: **Feb-15**

SOURCE: CEMENT KILN

DAY	Total Flue Gas	Main Stack		Clinker Cooler Stack		30-Op Day Rolling Average	24-hr Rolling Average	24-hr Rolling Average D/F
	Flow	Dust	Opacity	Dust	Opacity	Lime Usage	Temp	ng-TEQ @ 7% O ₂
	Average	Average	Daily Max	Average	Daily Max	Average	Average	Average
	<u>d-kscfm</u>	<u>mA</u>	<u>%</u>	<u>mA</u>	<u>%</u>	<u>ston/day</u>	<u>Deg C</u>	<u>EPA TEQ</u>
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13	131	4.3	0.0	4.0	0.1	3.62	123	0.0023
14	225	4.5	0.0	4.0	1.8	3.69	172	0.0013
15	176	4.3	0.0	4.0	3.0	3.70	159	0.0017
16	196	4.1	0.0	4.0	3.2	3.62	135	0.0015
17	312	4.3	0.0	4.1	3.6	3.63	154	0.0010
18	297	4.2	0.0	4.0	4.0	3.64	149	0.0010
19	293	4.2	0.0	4.0	4.0	3.66	156	0.0010
20	293	4.1	0.0	4.0	3.8	3.68	150	0.0010
21	185	4.1	0.0	4.0	3.9	3.63	140	0.0016
22	364	4.2	0.0	4.0	0.0	3.65	165	0.0008
23	337	4.2	1.1	4.0	0.0	3.65	167	0.0009
24	326	4.2	1.0	4.0	0.0	3.65	157	0.0009
25	290	4.3	1.4	4.0	0.0	3.58	169	0.0010
26	317	4.3	1.7	4.0	0.0	3.49	170	0.0009
27	332	4.2	0.9	4.0	0.0	3.50	161	0.0009
28	323	4.2	0.4	4.0	0.0	3.52	169	0.0009

Kiln Down

**BAY AREA
AIR QUALITY MANAGEMENT DISTRICT
Monthly Continuous Monitoring Report**

**LEHIGH PERMANENTE CEMENT
Plant No. A0017**

**Sources: Precalciner Kiln (S-154)
Kiln Fuel Mill System (S-171)
Precalciner Fuel Mill System (S-172)**

Month: Feb-15

Pollutants: NOx, SO2, Hg

II. Statement of Excess Emissions (Negative Declaration Required)

Date	Time	Duration	Magnitude	Remarks
None to Report				

III. Monitor Malfunction (Including Flow Monitors)

Date	Time	Duration	Problem/Corrective Action
The new opacity monitor at the Clinker Cooler Stack faulted from 14:47 on 02-25-2015 to 12:19 on 02-27-2015. RCA #06T47 was submitted to BAAQMD.			The new opacity monitor at the Clinker Cooler Stack was cleaned, then calibrated, and put back in service at 12:19 on 02-27-2015.



03/30/15

Signature and Date